Phyllis J. Verhonick Nursing Conference

Excellence Through Evidence

Nancy Donaldson RN, DNSc., FAAN

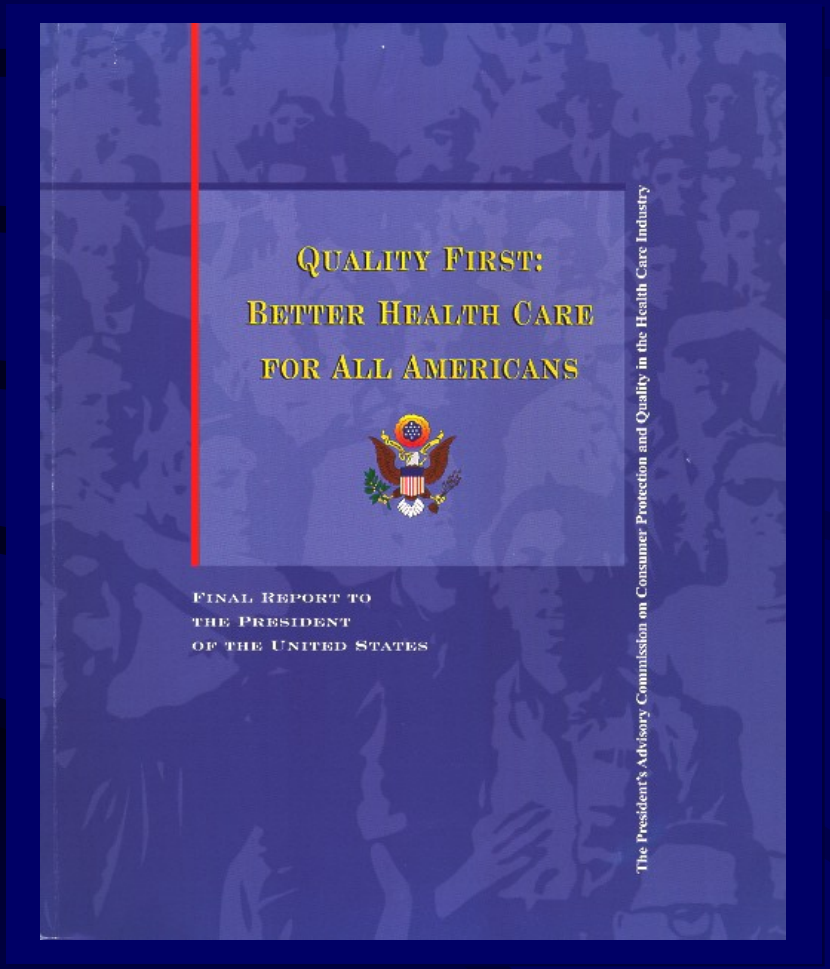
Director, UCSF Stanford Center for Research & Innovation in Patient Care

UCSF School of Nursing

Aims of this Presentation

- Examine the demand for *evidence of excellence* and *excellence through evidence.*
- Identify core competencies and tools for nurse leaders that advance excellence through evidence.
- Explicate strategies and tactics to expedite excellence through evidence.

Galvanizing the National Focus on Quality & Safety

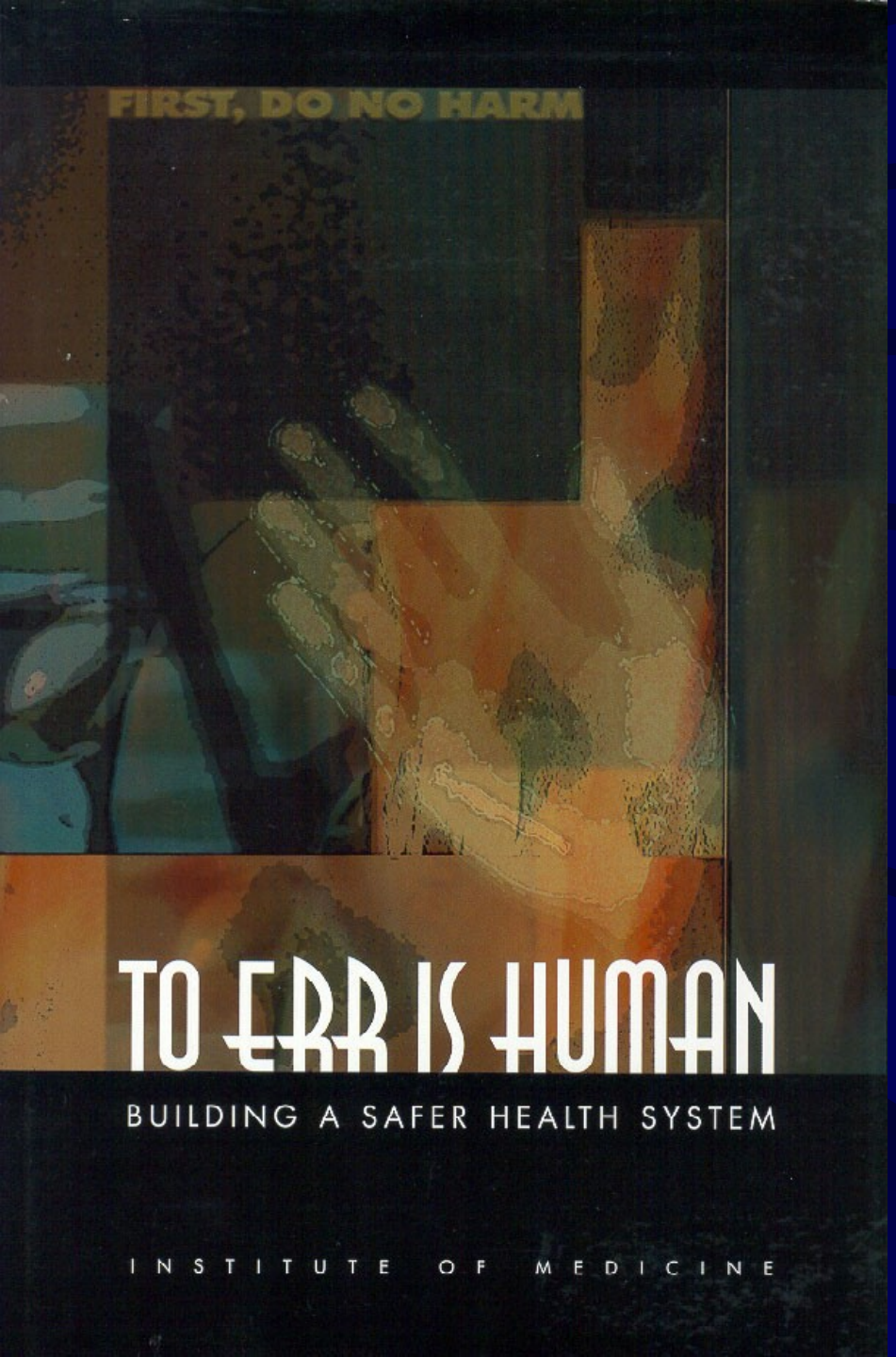

QUALITY FIRST:
BETTER HEALTH CARE
FOR ALL AMERICANS
FINAL REPORT TO
THE PRESIDENT
OF THE UNITED STATES
The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry

President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry Report (1998).

Healthcare Quality

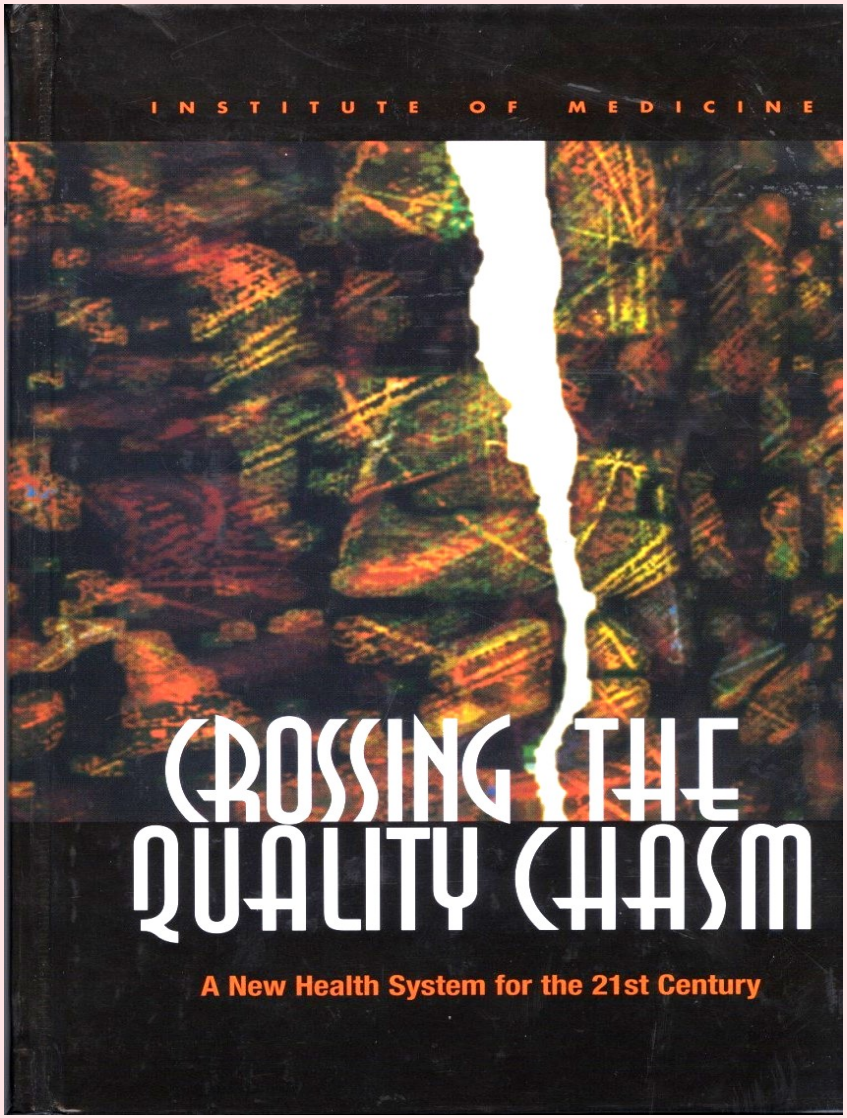
"the degree to which health services for individuals and *populations* increase the likelihood of desired health outcomes and are *consistent with current* professional *knowledge*"

IOM (1994)



Creating the Sense of Urgency —from Quality as a focus to Safety----- November 1999 IOM Panel Reports--Medical mistakes cost $29 Billion and 98,000 deaths (NY Times & CNN)

The Blueprint for Improvement



IOM (2001). Crossing the Quality Chasm

Institute of Medicine Report
Crossing the Quality Chasm

- **There are serious problems in quality**
  - ***Between the health care we have and the care we could have lies not just a gap but a chasm.***
- **The problems come from poor systems… not bad people**
  - ***In its current form, habits, and environment, American health care is incapable of providing the public with the quality health care it expects and deserves.***
- **We can fix it… but it will require changes**

Crossing the Quality Chasm

Clarifying National Aims for Improvement

- **Safety** -- As safe in health care as in our homes
- **Effectiveness** -- Matching care to science; avoiding overuse and under-use
- **Patient Centeredness** -- Honoring the individual, and respecting choice
- **Timeliness** -- Less waiting for both patients and those who give care
- **Efficiency** -- Reducing waste
- **Equity** -- Closing racial and ethnic gaps in health status

Excellence Through Evidence
Core Competencies

- Capacity for Evidence-based Clinical Measurement and Benchmarking
- Capacity to *Use* Data to Drive Planning, Decision-making, Evaluation and Improvement
- Data Sharing and Information Extraction
- Information Literacy as a Strategic Priority
- Research Valued as a Cultural Norm
- Research Use Maximized
- Mastery of the Art & Science of Innovation
- Passionate Leadership

Capacity for Evidence-based Clinical Measurement and Benchmarking

- Leverage a clinical management dashboard
- Integrate quality, workforce, safety, HR and outcomes indicators
- Align with NDNQI and NQF measures—VANOD!
- Examine staffing/clinical effectiveness
- Benchmark regionally & nationally
- Institutionalize dashboard review, accountability and

In God We TRUST

All others bring DATA!

The Business Case for Performance Measurement/Management

- Accreditation
- Regulation
- Incentive Payment
- Demand for data by purchasers and/or payers
- Managed care
- Transparency
- Other strategic imperatives

Leverage the Data *Dashboard—*

Healthcare Instrument Panel

Dashboard Example

Operational Indicators

Quality Indicators

Satisfaction Indicators

	Item No.	Indicator [1]	Actual Performance	Performance Benchmark	Indicator Value [2]
Operations	1	RN turnover rate	0.98%	1.00%	1.02
	2	RN filled positions rate	89.4%	86.0%	1.04
	3	RN traveler and registry utilization rate	11.0%	12.7%	1.16
	4	RN hours per patient day	6.36	4.31	1.48
	5	Total hours per patient day	8.03	7.73	1.04
	6	Patient:RN ratio	3.77	5.94	1.57
	7	RN hours per patient discharge	26.1	27.4	0.95
	8	Skill Mix	80.3%	65.0%	1.24
	9	Overtime usage	1.7%	1.4%	0.83
	10	% timely employee performance evaluations	99.2%	100%	0.99
	11	RN hours per case or visit	6.36	1.73	3.69
	12	Supply charges per patient day	$20	$25	1.22
Quality Monitoring	13	Falls per 1000 patient days	3.54	2.38	0.67
	14	Falls with moderate or serious injury per 1000 patient days	0.15	0.05	0.34
	15	Medication errors per 1000 patient days	4.73	3.62	0.77
	16	Hospital-acquired pressure ulcers per 1000 patient days (all stages)	1.48	1.29	0.88
	17	Vascular Access Device (VAD) incidents per 1000 patient days	0.44	0.36	0.82
	18	POCT QC testing performance	2.40	3.50	0.69
	19	Controlled substances wastage compliance	99.6%	100%	1.00
	20	Weight documented upon admission	89%	95%	0.93
	21	Admission assessment completed within 24 hours	90%	95%	0.94
	22	Pain assessment performed upon admission	81%	95%	0.85
	23	Restraint usage documentation	58%	95%	0.61
	24	Pediatric assessment performed	N/A	N/A	N/A
	25	Self and accidental extubations per 1000 patient days	N/A	N/A	N/A
	26	OR incorrect instrument, needle, sponge counts	N/A	N/A	N/A
Satisfaction	27	Overall satisfaction with nursing care	88.11	84.20	1.05
	28	Likelihood of your recommending this hospital to others	91.60	85.90	1.07
	29	How well was your pain controlled	85.99	83.40	1.03
	30	Overall rating of unit (std. Press Ganey items)	83.75	81.20	1.03
	31	Perioperative Division patient satisfaction survey	N/A	N/A	N/A

Actual Performance: The actual performance of the unit/area for that month

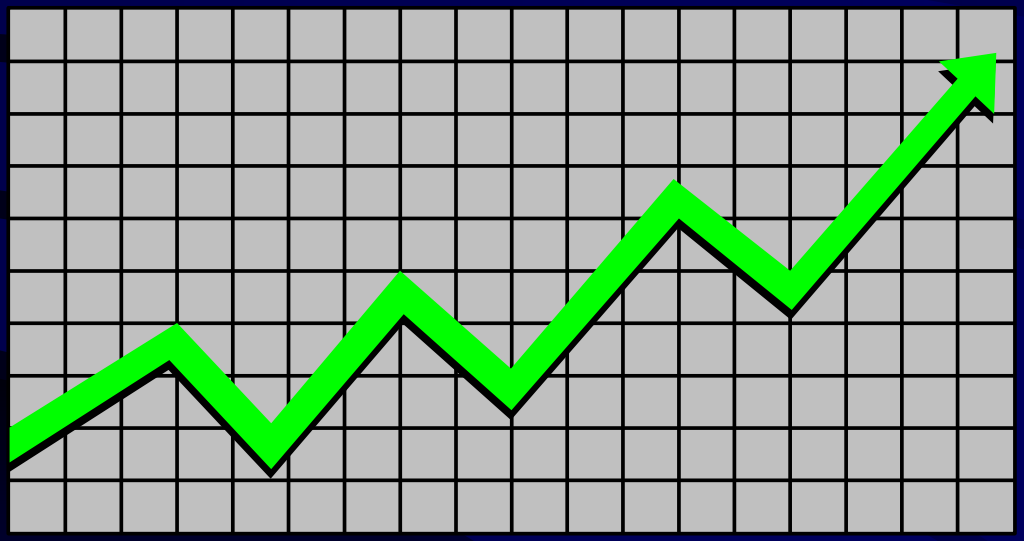
Performance Benchmark: Determined by past performance, an external benchmark or an internal goal

Indicator Value: A ratio calculated from the actual performance and the performance benchmark; a value equal to or greater than 1.0 is desirable

Use Data to Drive Planning, Decision-making, Evaluation and Improvement

- Integrate information gleaned from data into dialogue, debate and decisions
- Drill down
- Trace trends
- Use SPC charts to interpret variation
- Display data and disseminate to provide feedback and reinforcement
- Pursue improvements in data reliability and validity

The Role of Measurement in Perpetual Practice Improvement

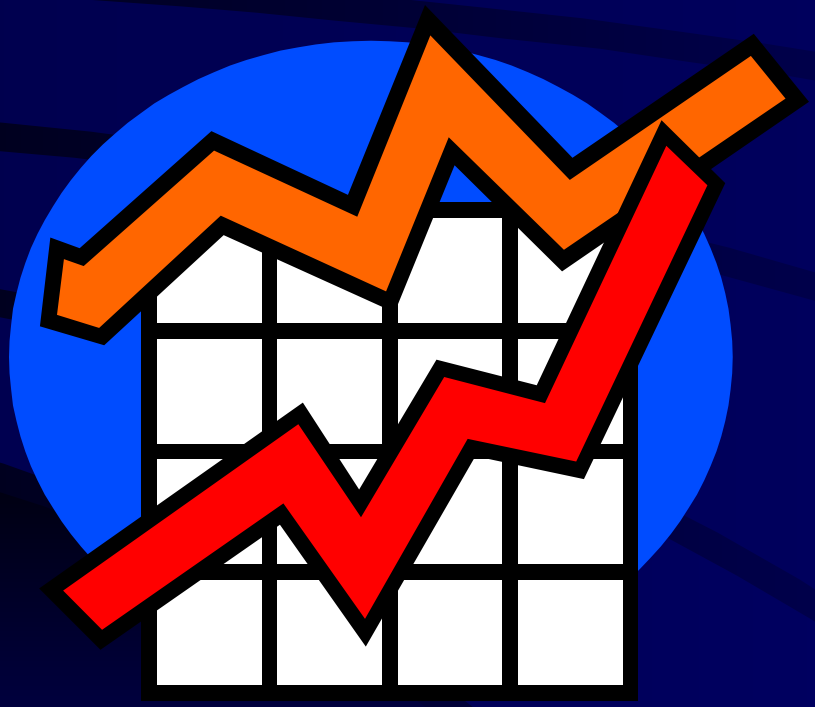


Why Measure?

- **Understand current care process**
- **Understand attitudes of key customers**
- **Drive process improvement team**
- **Establish baseline**
- **Trace *variation* & impacts of improvement**
- **Establish comparable performance**

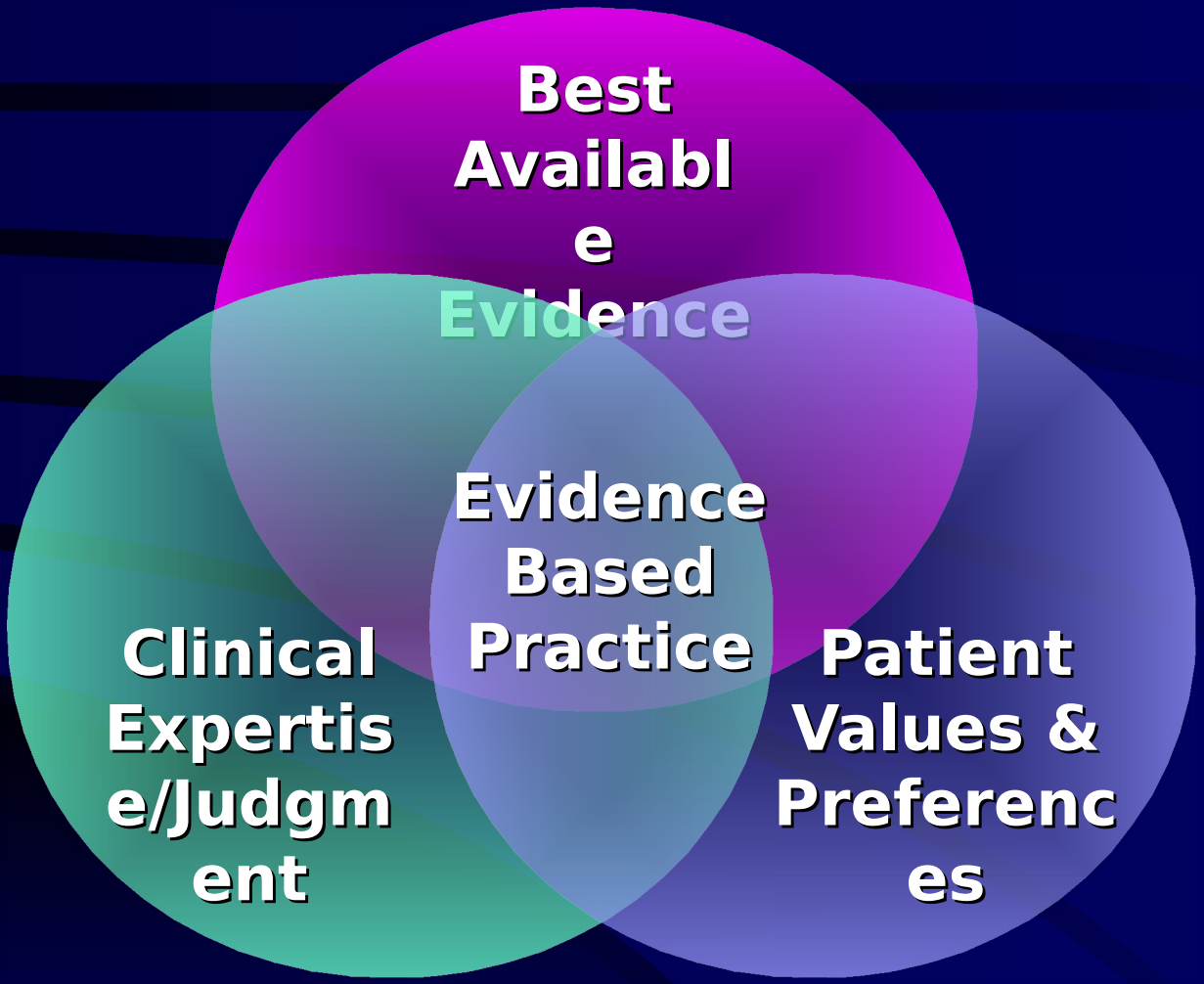
Improving Patient Care

Using Evidence



Evidence-Based Practice Defined

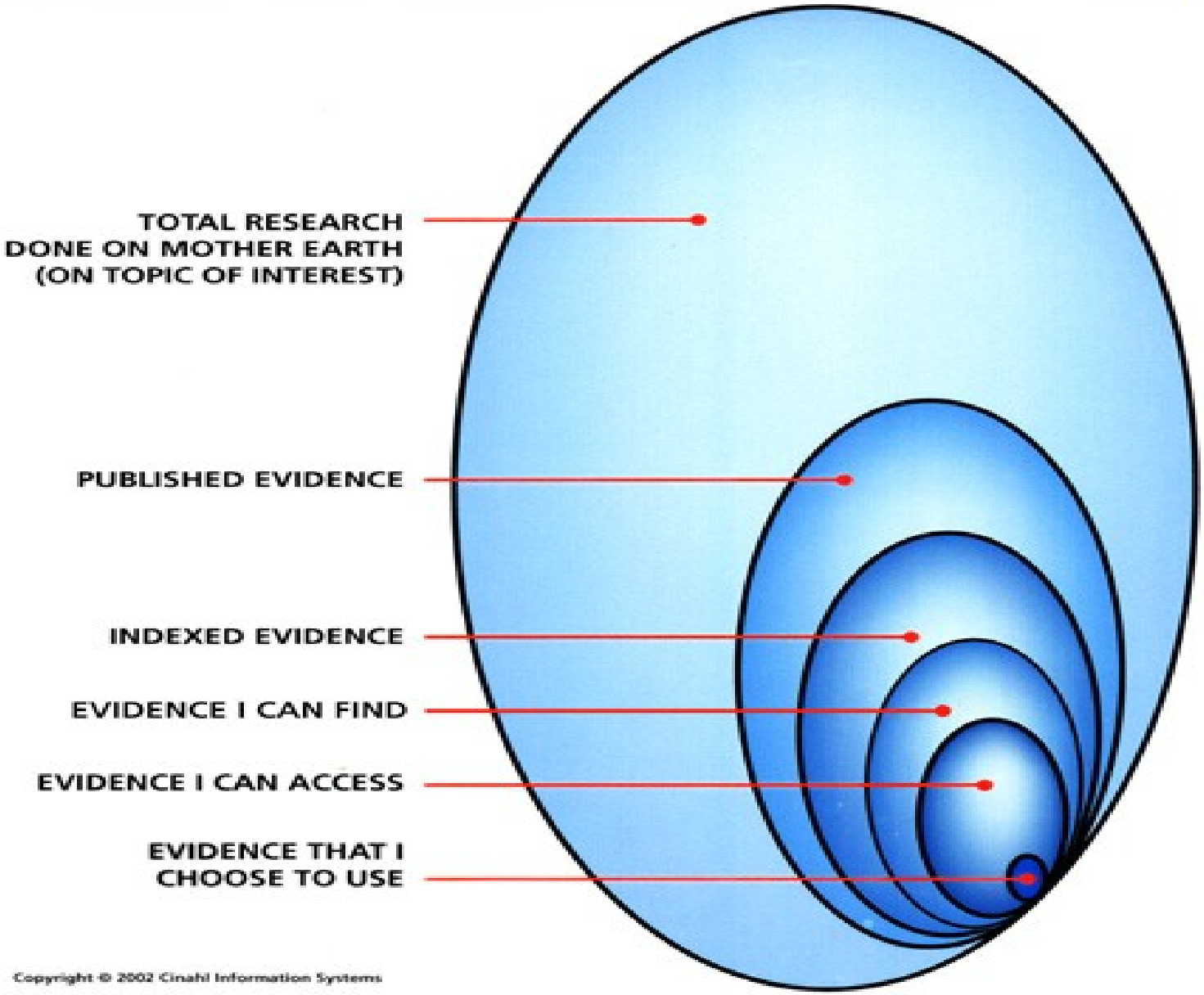
Sackett et al defined EBP as the "conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients"


Best Available Evidence
Evidence Based Practice
Clinical Expertise/Judgment
Patient Values & Preferences

Hierarchy of Evidence

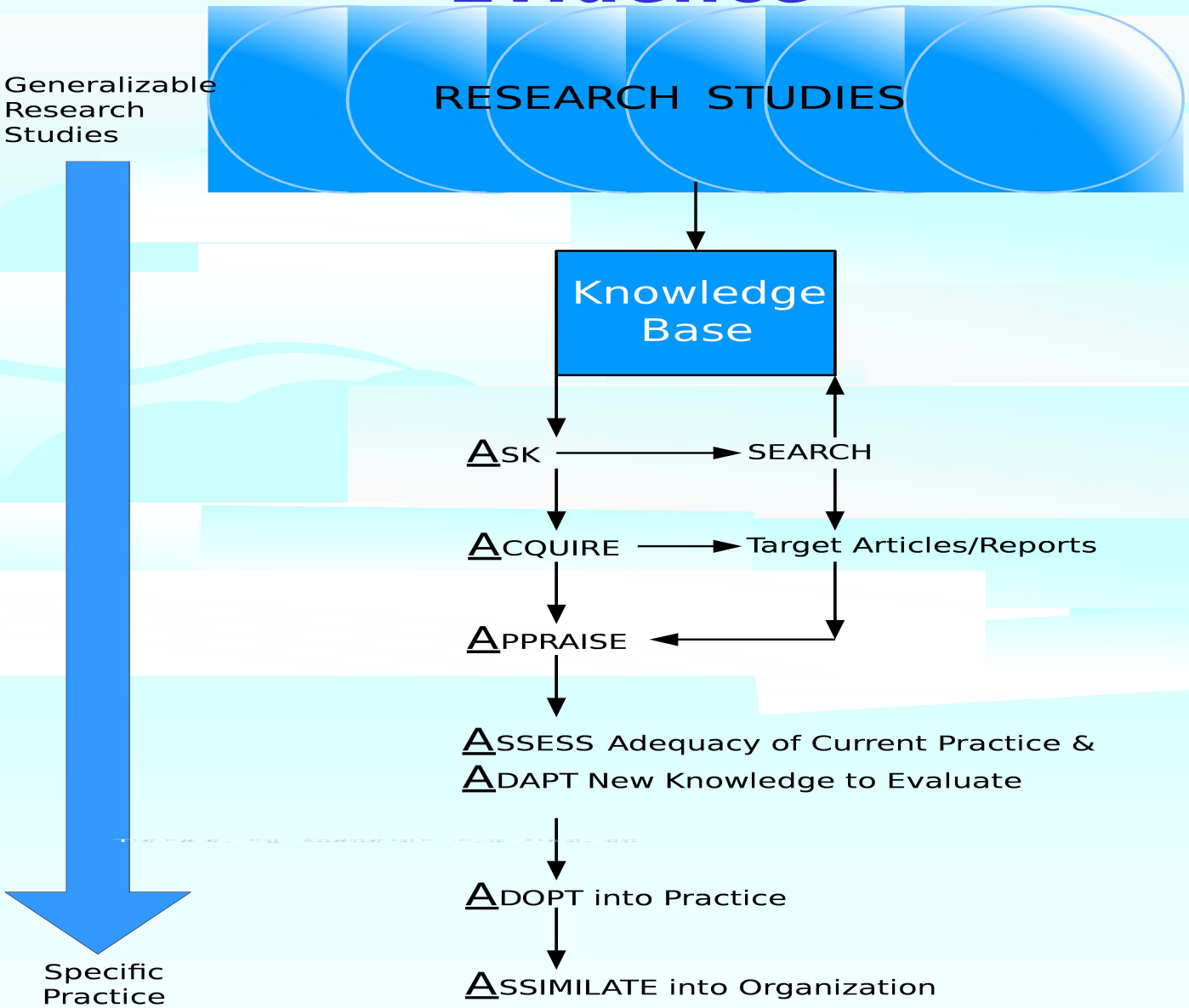
- Randomized Controlled Trials (RCTs)
- Cohort Studies
- Case-control Studies
- Case series or Reports
- Expert Opinion

EVIDENCE-BASED PRACTICE DILEMMA


TOTAL RESEARCH DONE ON MOTHER EARTH (ON TOPIC OF INTEREST)
PUBLISHED EVIDENCE
INDEXED EVIDENCE
EVIDENCE I CAN FIND
EVIDENCE I CAN ACCESS
EVIDENCE THAT I CHOOSE TO USE

Copyright © 2002 Cinahl Information Systems

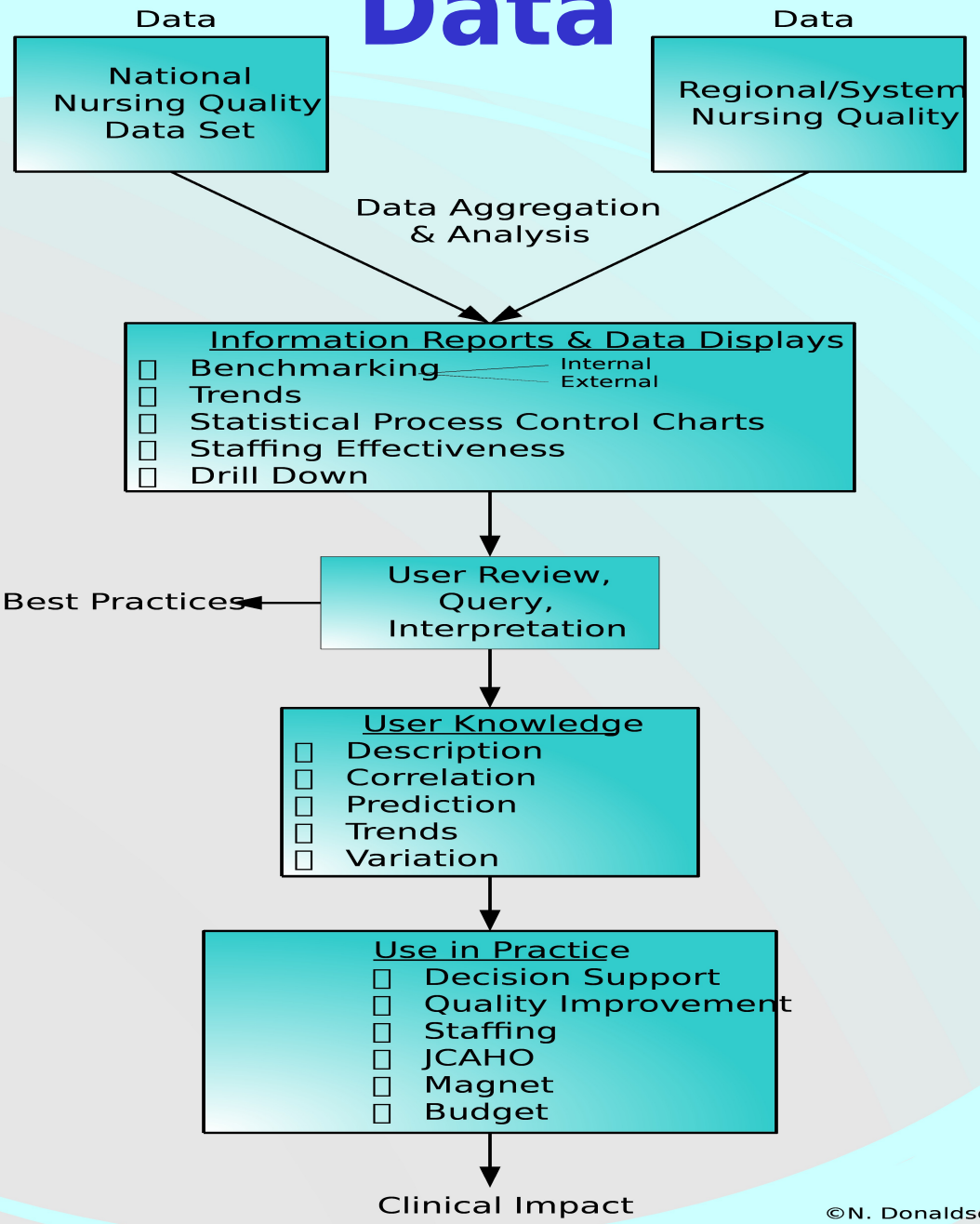
Generating & Using Research-Based Evidence



Sources of Best Evidence

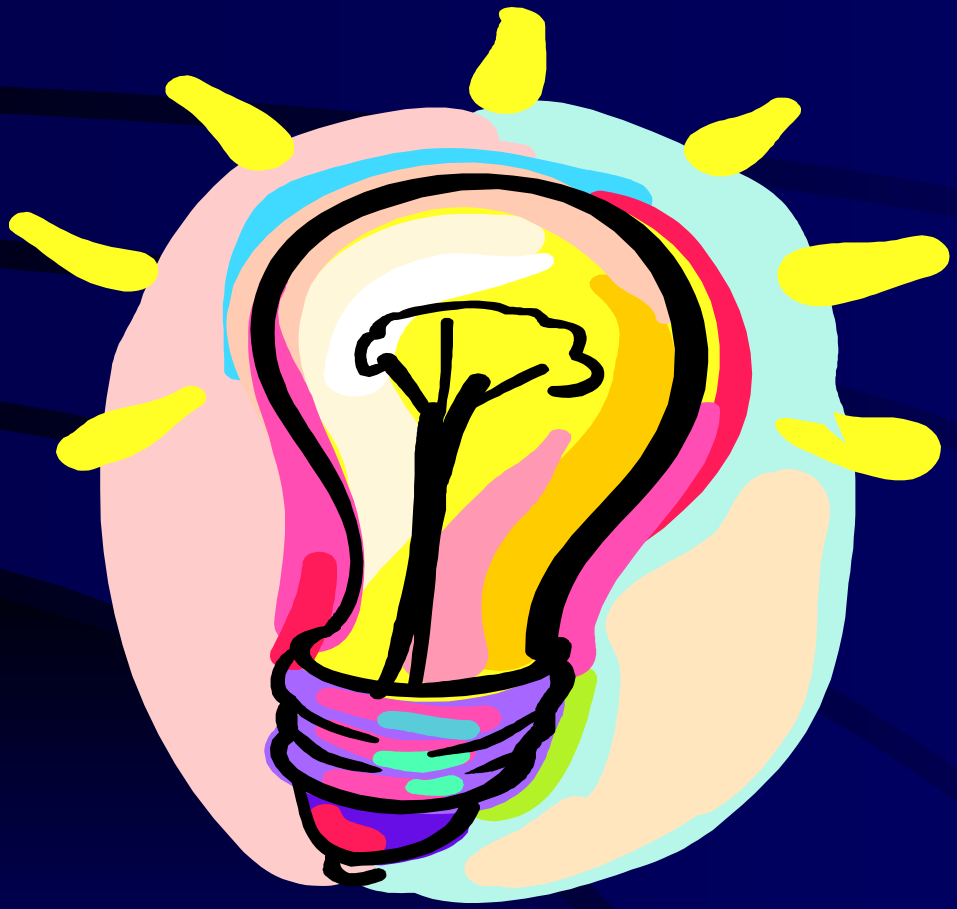
- Meta-analyses
- Systematic Literature Reviews/Syntheses
- Authoritative Evidence-based Guidelines
- Individual Papers, Presentations & Research Reports
- Best Practices

Generating Knowledge from Data



©N. Donaldson 2004

Information Literacy as a Strategic Priority



Informatics Competencies

- Computer + Information Literacy
- Beyond computer literacy*
  - Acquire various types of data, information, and knowledge
  - Organize data, information, and knowledge
  - Critically analyze and synthesize data, information, and knowledge
  - Apply data, information, and knowledge in the clinical decision making and care provision process

* Bakken, S. (1999)

Data Sharing & Information Extraction

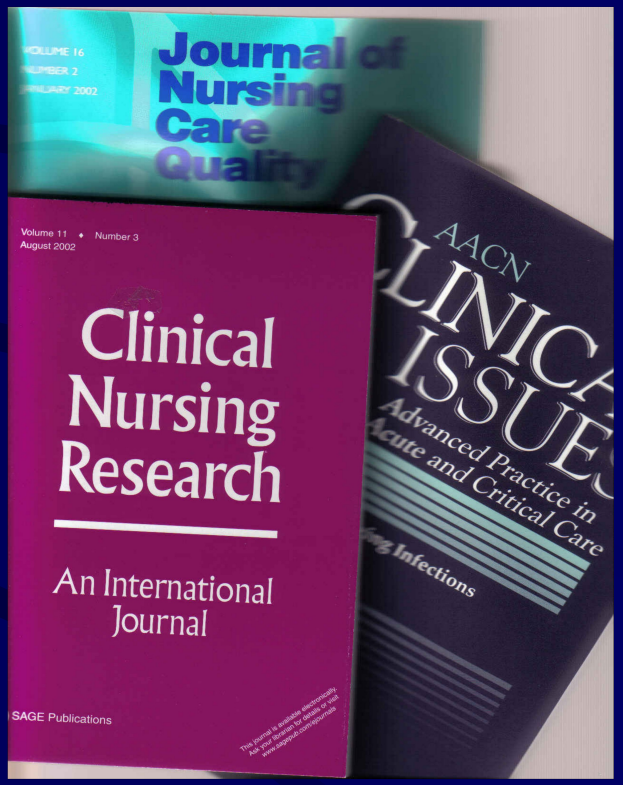
- Engage stakeholders in data review and interpretation
- Generate questions based on data
- Seek consultation for data management, manipulation and display
- Know data sources
- Build strategic partnerships for data sharing

Don’t Trivialize Expert Opinion & Clinical Reports

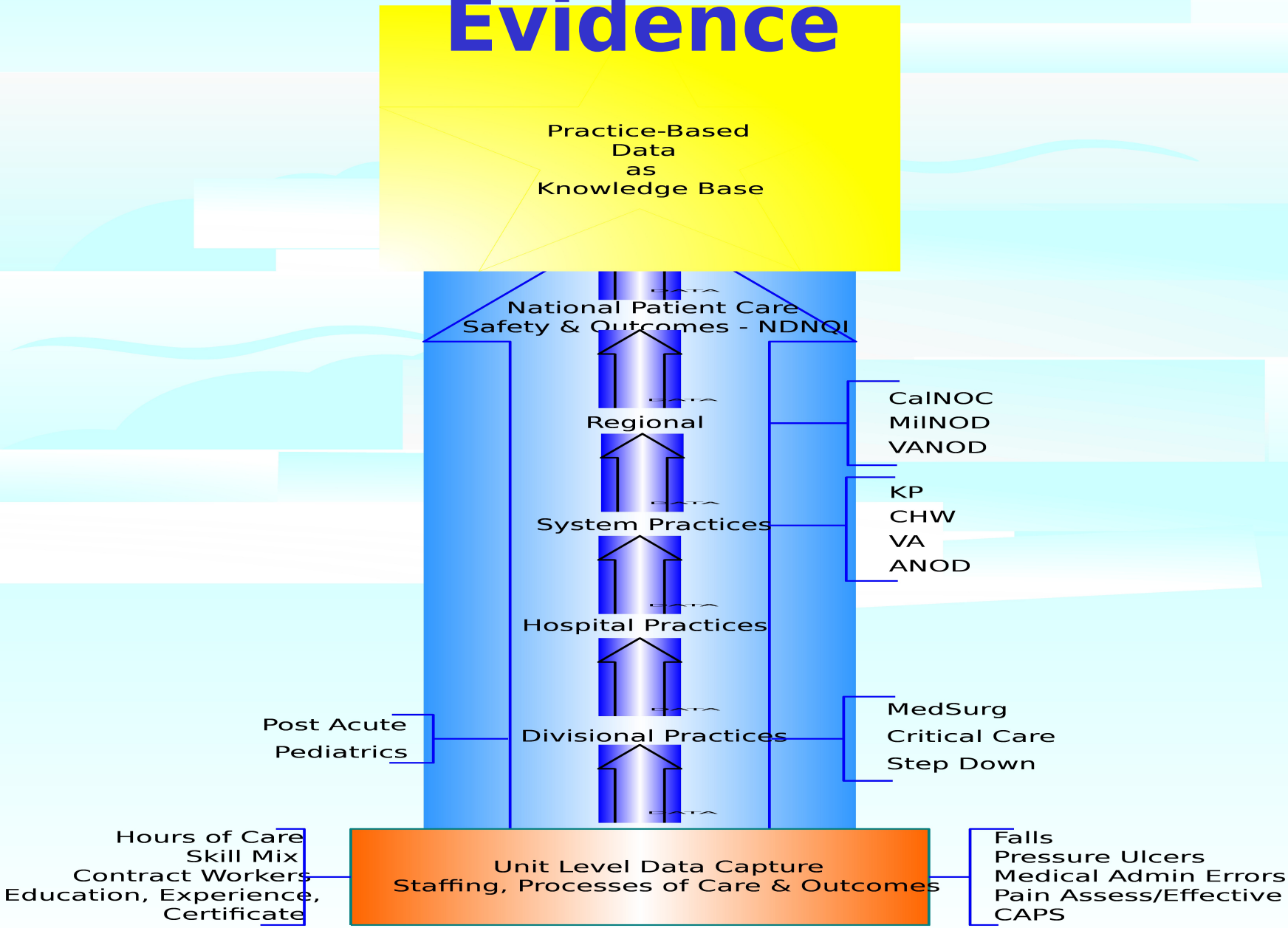
- Invaluable insights/ideas
- Adoption TACTICS

Research Use Maximized

- Help staff ask, access, and acquire research
- Develop capacity for systematic analysis and aggregation of studies
- Develop capacity for research translation, pilot testing, results assessment and adoption
- Demand evidence based practice



Generating Practice-Based Evidence



©N. Donaldson 2004

California Nursing Outcomes Coalition Database Project: An Update

Nancy Donaldson, DNSc, RN, FAAN
Diane Brown, PhD, RN, FNAHQ, CPHQ
Linda Burnes Bolton Dr.PH, RN, FAAN
Carolyn Aydin, PhD.

CalNOC Project Overview

The California Nursing Outcomes Coalition (CalNOC) Database Project is **a collaborative initiative engaging a diverse team** of staff nurses, advanced practice clinicians, educators, researchers, administrators and leaders in nursing **in attaining a shared vision of designing, systematically implementing, and evaluating a statewide nursing outcomes database.**

CalNOC Vision

Advancing Patient Care

CalNOC Mission

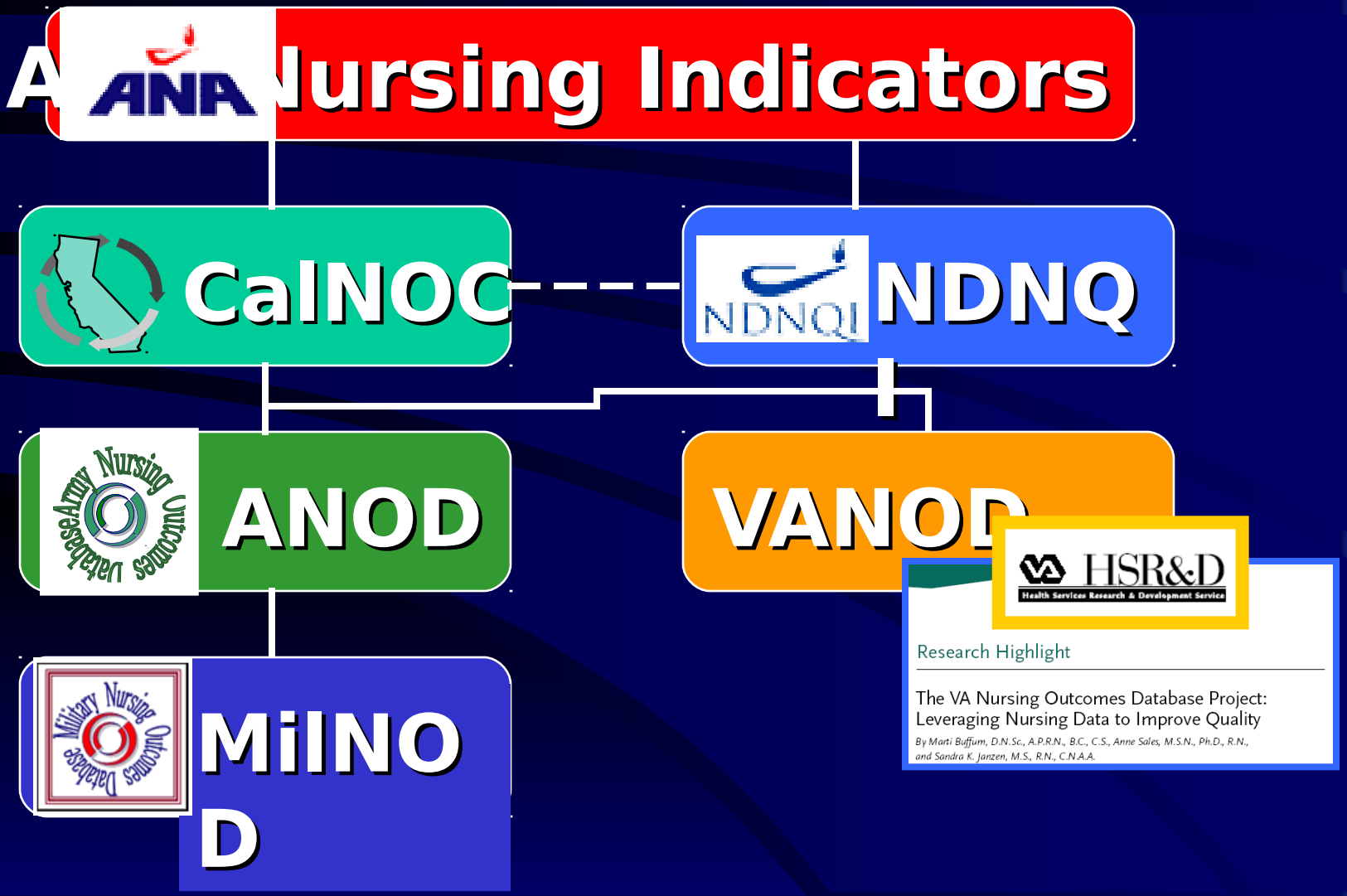
CalNOC advances improvements in patient care quality, safety, and effectiveness by...

- **Building and sustaining a valid and reliable statewide outcomes database**
- **Conducting research to advance evidence-based interventions to achieve quality**
- **Synthesizing and disseminating data to shape public policy, practice, and education**

Sources of CalNOC Funding

- ANA Grants 1996; 1998; 1999
- Kaiser Permanente Grants
- UniHealth Grants 1995 & 1996
- Calif. Health Care Foundation 2000
- AHRQ Conference Grant 2000
- Direct & Indirect funding from ANA\C
- Direct & Indirect funding from ACNL
- Direct & Indirect funding from UCSF School of Nursing--1996-1997; 1999 to now.
- Generous donations of support and in-kind services from CalNOC sites and Members of the CalNOC Steering Committee

CalNOC Family Tree



CalNOC Measurement Capacity

Structural Indicators

- Hours per Patient Day
- Skill Mix
- Ratios
- Use of Contract Staff
- Nurse Education--highest degree and certification

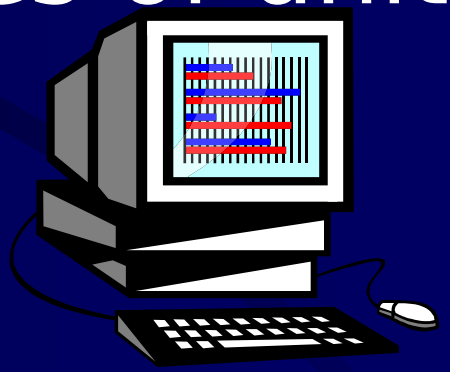
CalNOC Measurement Capacity

Process Indicators

- Falls--Risk and Consequential
- Pressure Ulcers (prevalence)
- Restraint Use (prevalence)

Unit of Analysis

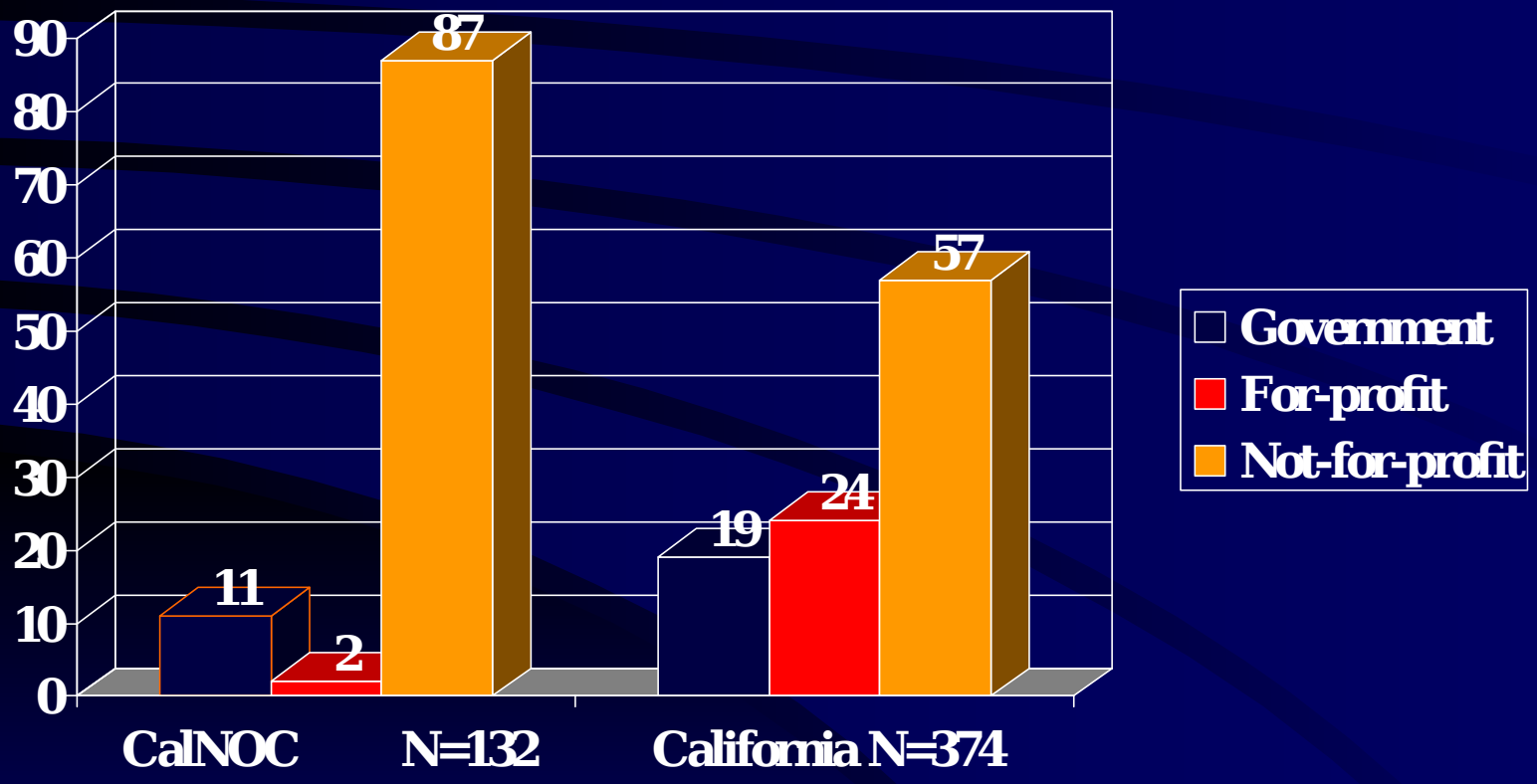
- Patient level data aggregated to unit level
- Unit level--Critical Care, Step-Down and Med-Surg unit level data
- Divisional Level (types of unit)
- Hospital level



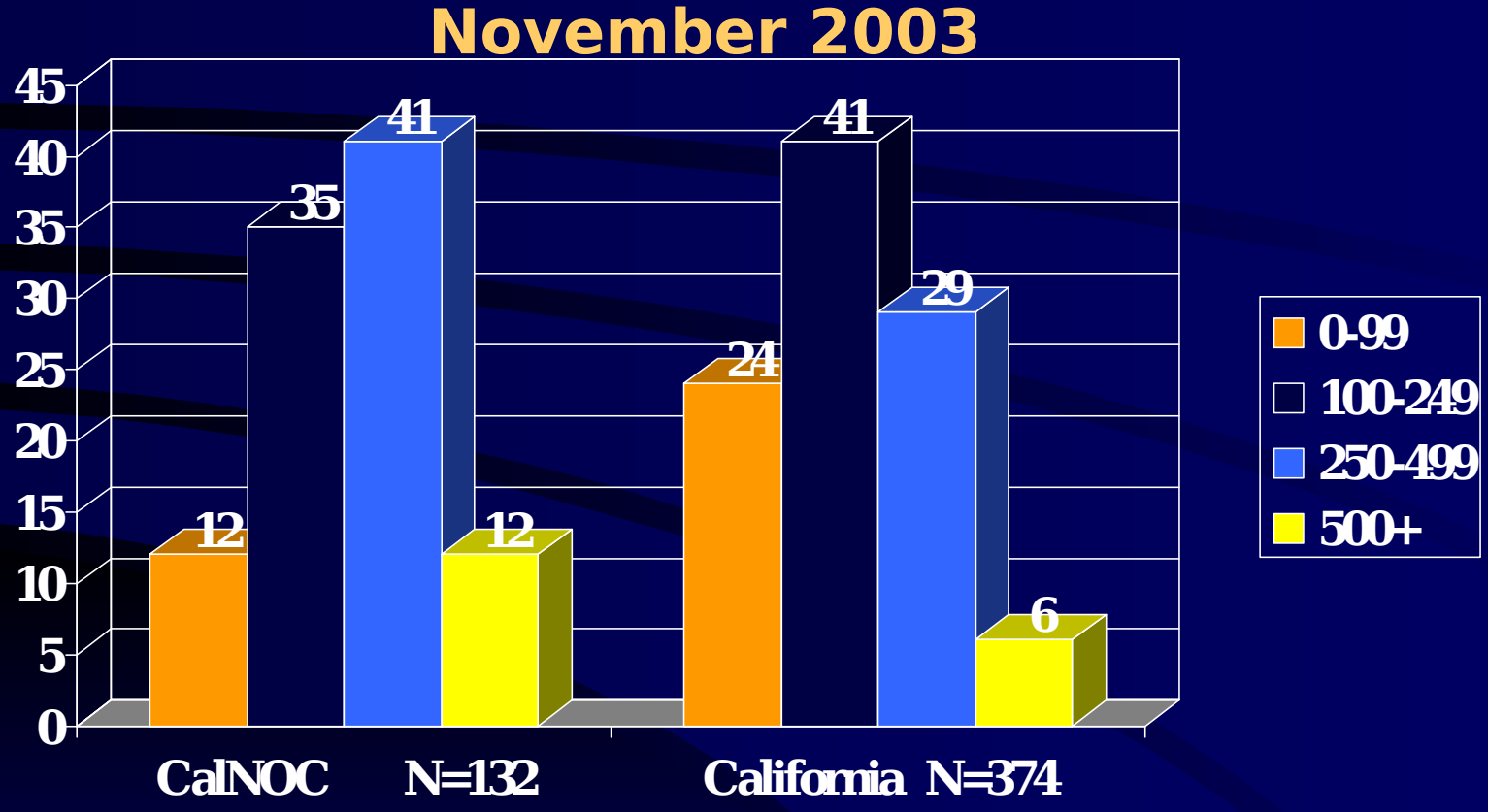
CalNOC Hospital Demographics

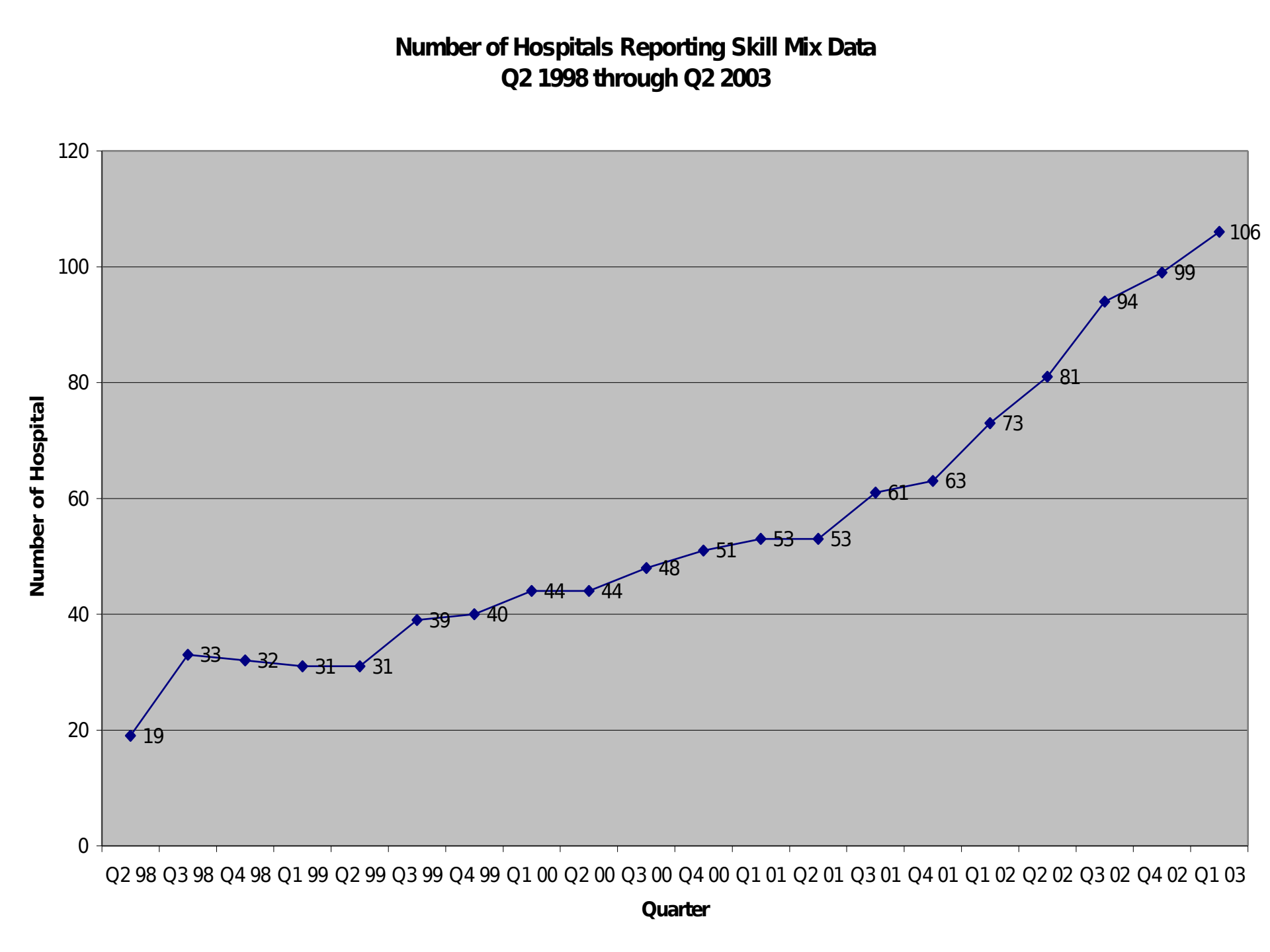
Average Daily Census	<100	100-199	200-299	300+	Total
Total Hospitals	48	50	26	10	134
Ownership					
Non-profit	44	46	24	7	121
For-profit	0	0	1	0	1
Federal government	3	4	0	1	8
Non-federal government	1	0	1	2	4
Total	48	50	26	10	134
Urban/Rural					
Urban	37	50	26	10	123
Rural	11	0	0	0	11
Total	48	50	26	10	134
Multi-Hospital System					
No	5	5	2	4	16
Yes	43	45	24	6	118
Total	48	50	26	10	134

Percentage of Hospitals by Ownership Type— November 2003



Percentage of Hospitals by Licensed Bed Category




Number of Hospitals Reporting Skill Mix Data
Q2 1998 through Q2 2003
Number of Hospital
Quarter
0
20
40
60
80
100
120
Q2 98
Q3 98
Q4 98
Q1 99
Q2 99
Q3 99
Q4 99
Q1 00
Q2 00
Q3 00
Q4 00
Q1 01
Q2 01
Q3 01
Q4 01
Q1 02
Q2 02
Q3 02
Q4 02
Q1 03
19
33
32
31
31
39
40
44
44
48
51
53
53
61
63
73
81
94
99
106

20 Quarters Staffing Data

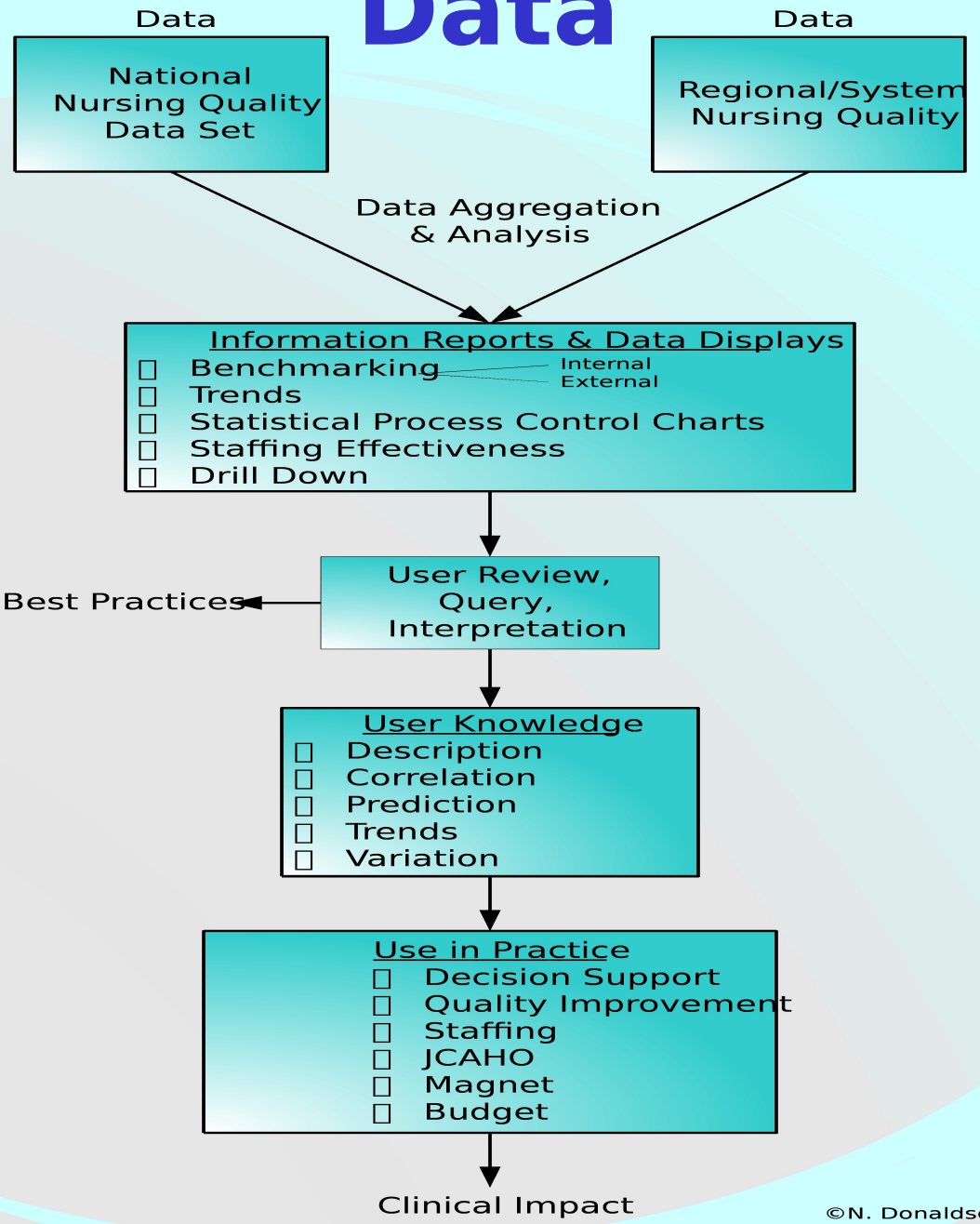
129 Hospitals Reporting Data

747 Nursing Units

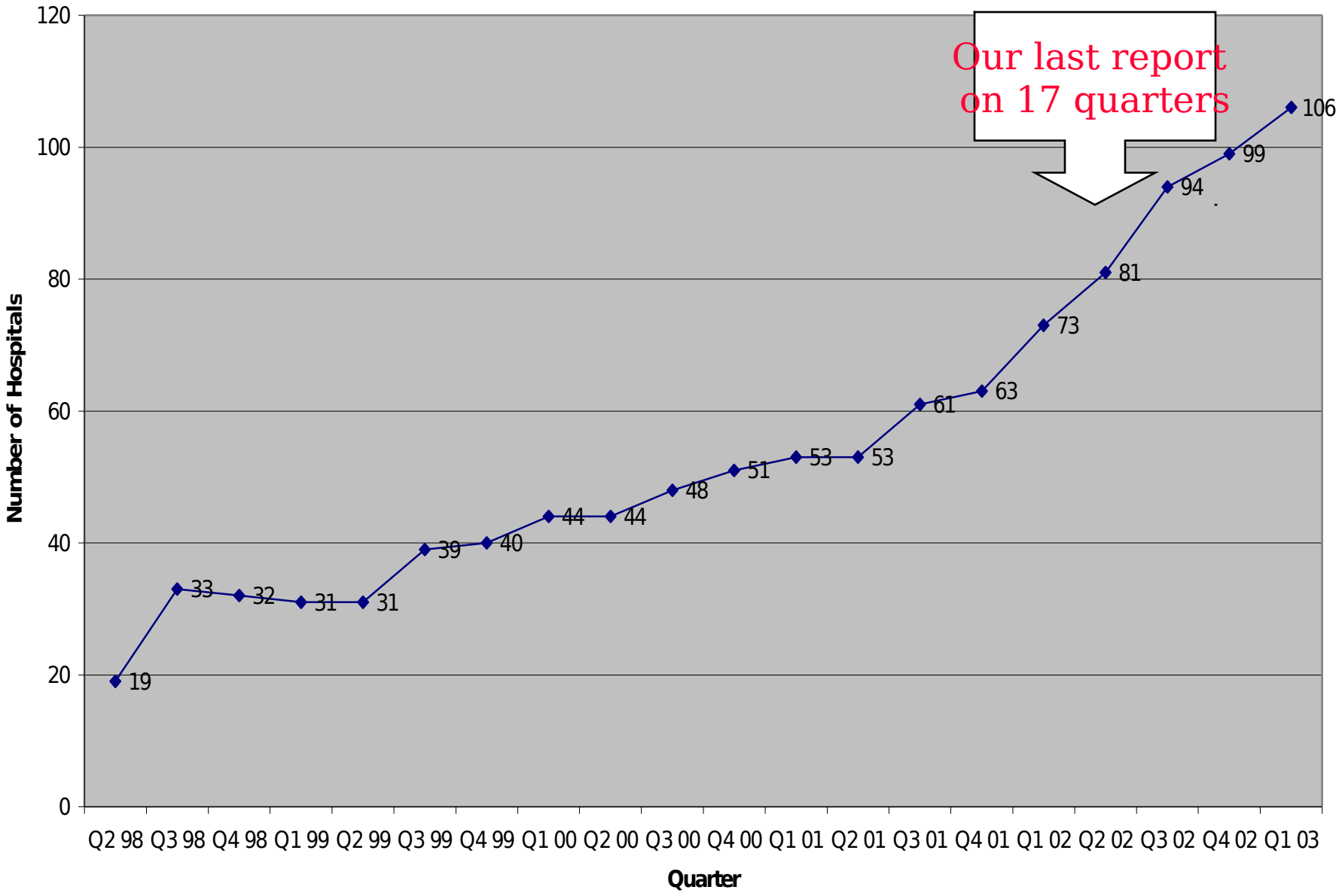
- 182 Critical Care
- 423 Medical/Surgical
- 142 Step Down

Over 12 Million Patient Days!

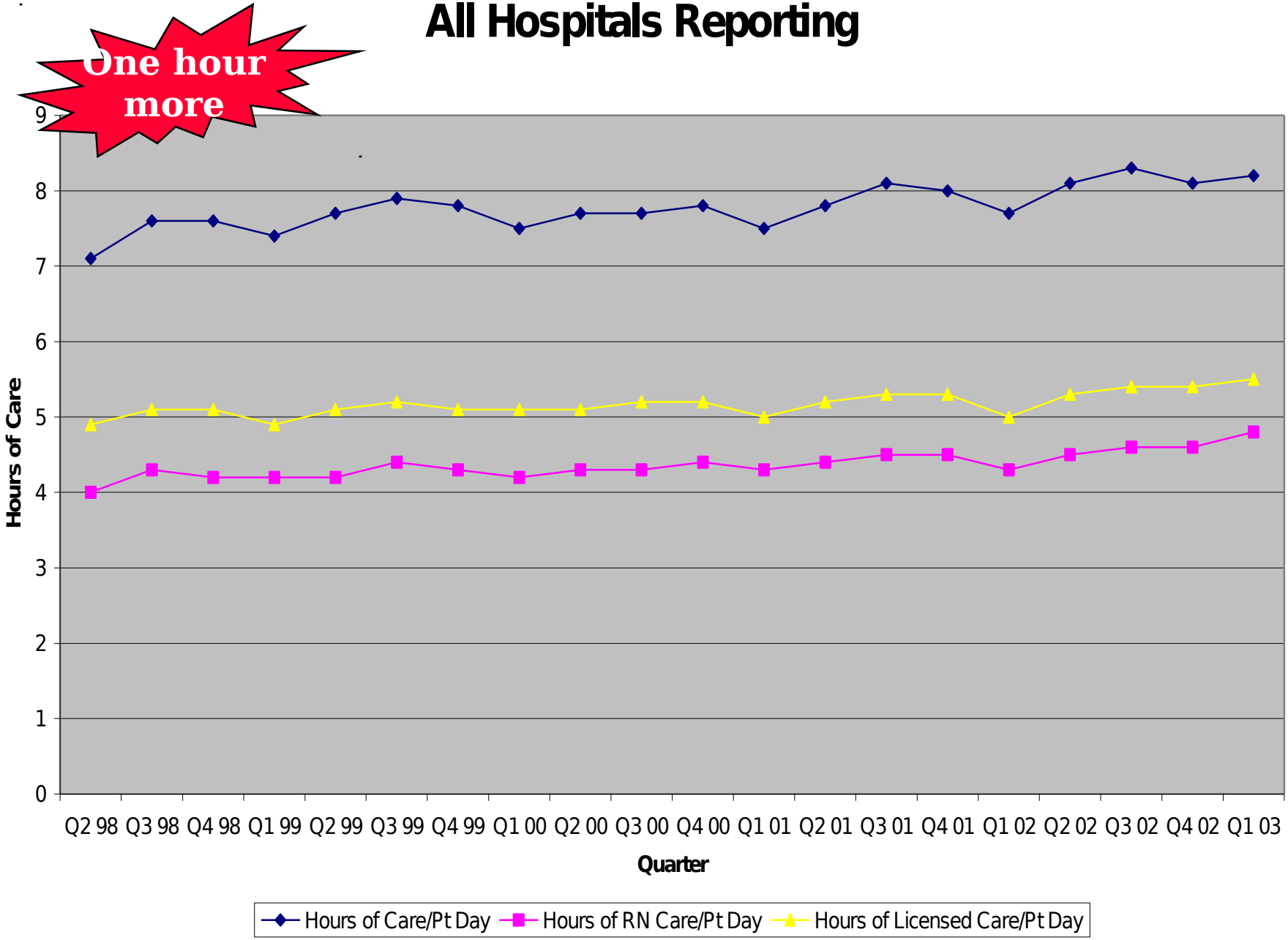
Generating Knowledge from Data

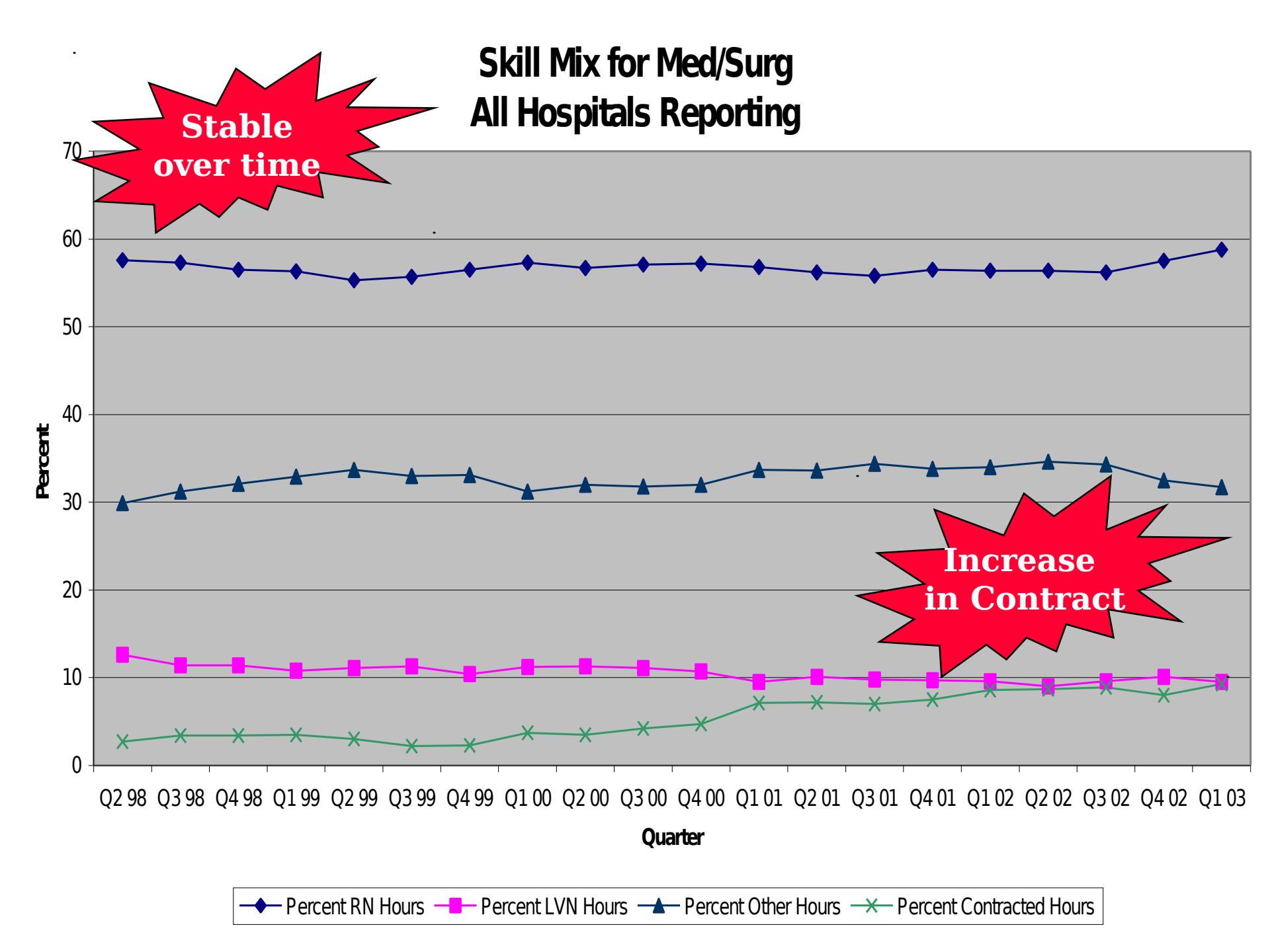


©N. Donaldson 2004

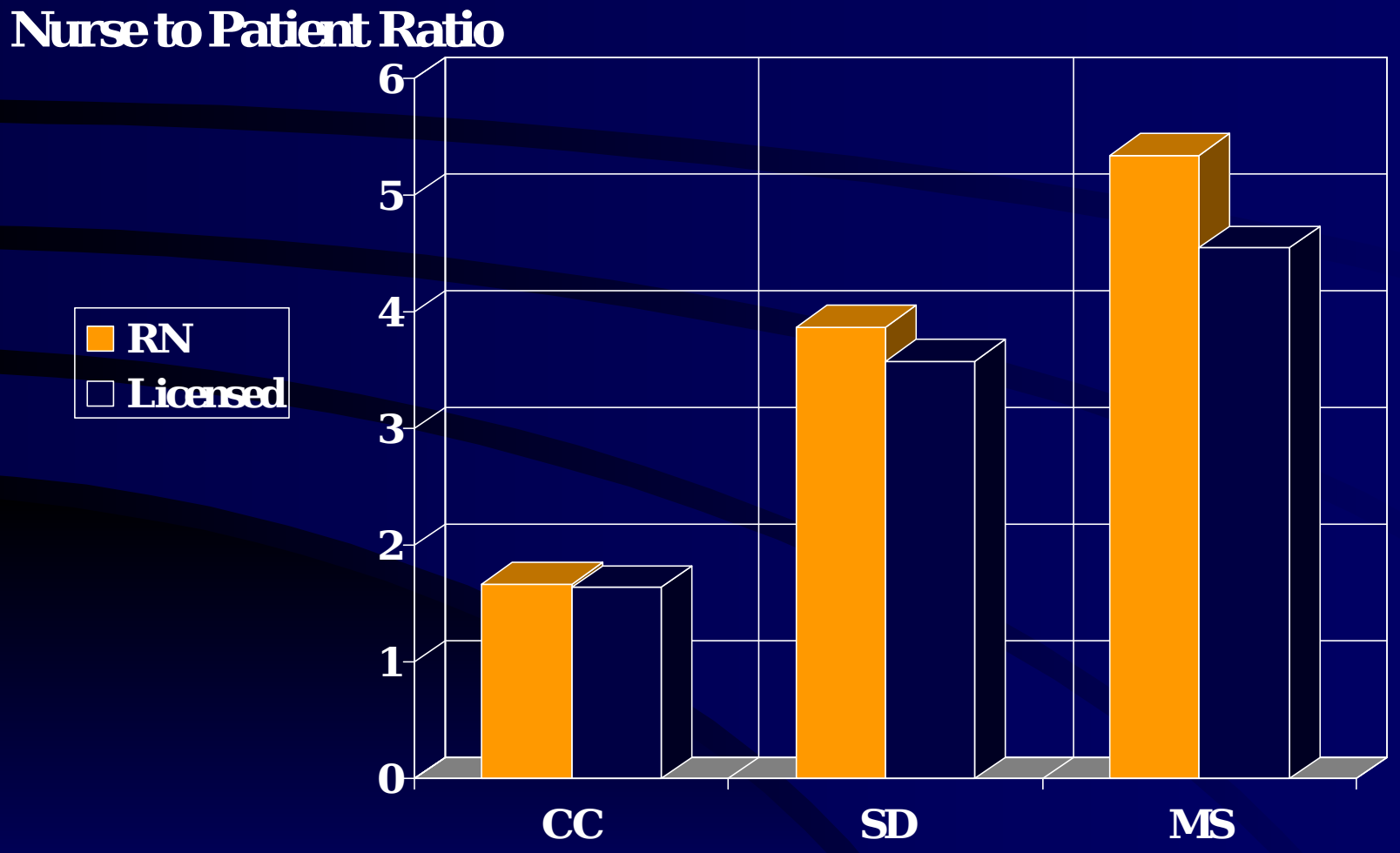

Number of Hospitals Reporting Skill Mix Data
Q2 1998 through Q2 2003
Our last report on 17 quarters
Number of Hospitals
Quarter
0
20
40
60
80
100
120
Q2 98
Q3 98
Q4 98
Q1 99
Q2 99
Q3 99
Q4 99
Q1 00
Q2 00
Q3 00
Q4 00
Q1 01
Q2 01
Q3 01
Q4 01
Q1 02
Q2 02
Q3 02
Q4 02
Q1 03
19
33
32
31
31
39
40
44
44
48
51
53
53
61
63
73
81
94
99
106

Hours of Care per Patient Day for Med/Surg
All Hospitals Reporting


One hour more
Hours of Care
0
1
2
3
4
5
6
7
8
9
Q2 98 Q3 98 Q4 98 Q1 99 Q2 99 Q3 99 Q4 99 Q1 00 Q2 00 Q3 00 Q4 00 Q1 01 Q2 01 Q3 01 Q4 01 Q1 02 Q2 02 Q3 02 Q4 02 Q1 03
Quarter
Hours of Care/Pt Day
Hours of RN Care/Pt Day
Hours of Licensed Care/Pt Day


Skill Mix for Med/Surg
All Hospitals Reporting
Stable over time
Increase in Contract
Percent
70
60
50
40
30
20
10
0
Q2 98
Q3 98
Q4 98
Q1 99
Q2 99
Q3 99
Q4 99
Q1 00
Q2 00
Q3 00
Q4 00
Q1 01
Q2 01
Q3 01
Q4 01
Q1 02
Q2 02
Q3 02
Q4 02
Q1 03
Quarter
Percent RN Hours
Percent LVN Hours
Percent Other Hours
Percent Contracted Hours

Number of Patients per Nurse
Q1 2003



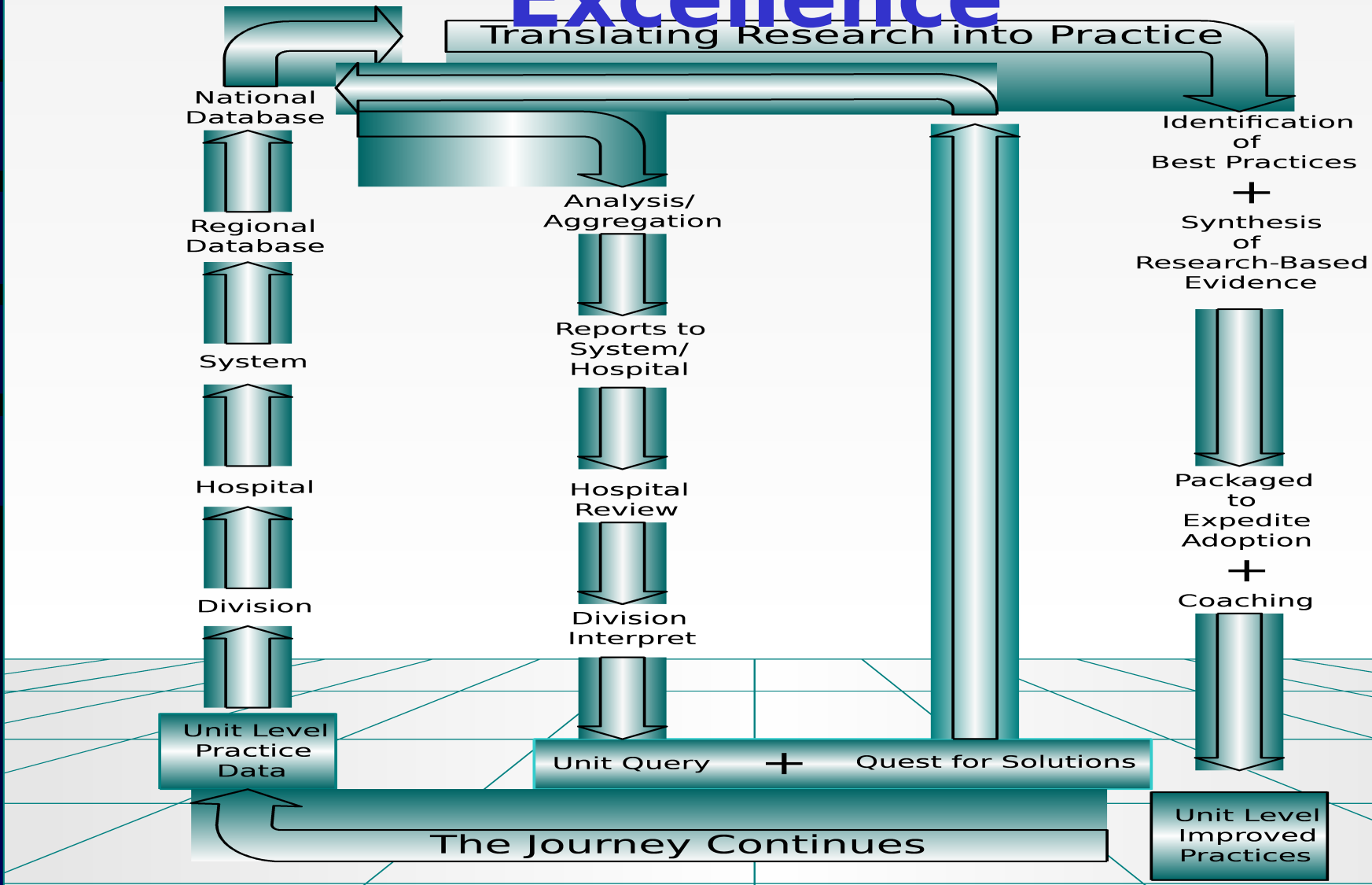
Pressure Ulcer Prevalence Data

- 113 hospitals (697 nursing units)
- 41,982 patient observations
  - ✓ Critical Care 6,254 (15%)
  - ✓ Step Down 8,089 (19%)
  - ✓ Medical/Surgical 27,639 (66%)
- 3.7% of patients age 90 and above

20 Quarters Falls Data

- 129 Hospitals Reporting Falls
- 34,262 Falls
  - ✓ 1,587 Critical Care (5%)
  - ✓ 7,606 Step Down (22%)
  - ✓ 25,069 Medical/Surgical (73%)

The Journey : Mileposts to Evidence - Based Excellence



ACNL
Association of California Nurse Leaders

AHRQ
Agency for Healthcare Research and Quality
Quality Research for Quality Healthcare

CalNOC Partners TRIP to Reduce Patient Falls Project

The primary aim of this 4 year quality improvement demonstration project is to reduce the incidence of patient falls and severity of fall related injury in 100 medical surgical patient care units in CalNOC hospitals through evidence-based coaching,

Baseline Data Sources

- Hospital and Unit-level fall rates; risk assessment; prevention effectiveness; injuries; subsequent falls
- Self-Assessment—hospital and unit level

Self-Assessment Strategy

CalNOC FCN _____

California Nursing Outcomes Coalition

CalNOC Partners for Quality
TRIP to Reduce Hospital Falls

Patient Care Unit Self-Assessment

Supported By AHRQ Grant to ACNL #1U18HS1370401

AHRQ Agency for Healthcare Research and Quality
Quality Research for Quality Healthcare

ACNL Association of California Nurse Leaders

UCSF University of California San Francisco

Nancy E. Donaldson RN, DNSc., FAAN—Principal Investigator, UCSF School of Nursing

Patricia McFarland RN, MS—Project Director, ACNL

CalNOC FCN _____

California Nursing Outcomes Coalition

CalNOC Partners for Quality
TRIP to Reduce Hospital Falls

Organizational Self-Assessment

Supported By AHRQ Grant to ACNL #1U18HS1370401

AHRQ Agency for Healthcare Research and Quality
Quality Research for Quality Healthcare

ACNL Association of California Nurse Leaders

UCSF University of California San Francisco

Nancy E. Donaldson RN, DNSc., FAAN—Principal Investigator, UCSF School of Nursing

Patricia McFarland RN, MS—Project Director, ACNL

Please Consider Your Overall Hospital Policies and Procedures

1. Is falls risk assessment administered on admission?
   ☐ Yes ☐ No
2. How was the falls risk assessment tool used in your organization developed?
   a. Internally developed within the organization with known reliability and validity
   b. Internally developed within the organization with unknown reliability and validity
   c. Published tool with known reliability and validity
   d. Published tool with unknown reliability and validity
   e. Unsure
3. After admission, does the hospital policy define the interval for falls risk reassessment as:
   a. As needed, thereafter based on nursing assessment
   b. At least every shift on all patients
   c. At least every shift on patients at risk
   d. Undefined
   e. other
4. Does the hospital policy define a process for fall risk assessment communication:
   a. From one shift to the next
      ☐ Yes ☐ No
   b. From one nursing unit to the next
      ☐ Yes ☐ No
   c. From one department to another when multiple disciplines provide care or treatment
      ☐ Yes ☐ No
5. Does actual patient care practice consistently match the policy for the process for fall risk assessment communication:
   a. From one shift to the next
      ☐ Yes ☐ No
   b. From one nursing unit to the next
      ☐ Yes ☐ No
   c. From one department to another when multiple disciplines provide care or treatment
      ☐ Yes ☐ No
6. What is the policy for reporting patient falls?
   a. Report all falls, actual or near-misses, with or without injury
   b. Report actual falls with or without injury
   c. Report falls with injury
   d. Report falls with serious injury only
7. In actual practice, what is the reporting practice generally followed?
   a. Report all falls, actual or near-misses, with or without injury
   b. Report actual falls with or without injury
   c. Report falls with injury
   d. Report falls with serious injury only
   e. Other? Please explain:

Your Physical Environment

1. What percentage of patient falls is attributed to the environment in your organization?
   a. _____ % (write figure)
   b. Unknown

2. How often does your organization evaluate how the physical environment contributes to patient falls?
   a. Not done
   b. Monthly or more often
   c. Quarterly
   d. Semi-annually
   e. Annually
   f. Sporadically/undefined frequency
   g. Unknown

3. Have actions been taken in the last 12 months based on the physical environment evaluation related to falls?
   ☐ Yes ☐ No ☐Unknown

4. Are actions planned for the next 12 months based on the physical environment evaluation related to falls?
   ☐ Yes ☐ No ☐Unknown

5. Has the availability of fall prevention equipment been evaluated in the past 12 months?
   ☐ Yes ☐ No ☐Unknown

6. Does your organization use any equipment to assist with falls prevention
   ☐ Yes (what kind?_____)
   ☐ No
   ☐ Unknown

7. Has action been taken in the past 12 months based on the evaluation of falls related equipment availability?
   ☐ Yes ☐ No ☐Unknown

8. Are any actions planned for the next 12 months based on the evaluation of falls equipment availability?
   ☐ Yes ☐ No ☐Unknown

9. Does your organization have a post-fall assessment process to critically fast-track analysis of fall occurrence factors in an effort to change or modify plans of care in order to protect patients from repeat falls and falls related injuries?
   ☐ Yes ☐ No ☐Unknown

About Falls Related Staff Education in Your Hospital

1. Are new employees in the following clinical roles provided with orientation to falls assessment/prevention and is annual competency assessed?

	Orientation		Annual Competency	
Discipline	Yes	No	Yes	No
RN Nursing Staff				
LVN Nursing Staff				
NA Nursing Staff				
Respiratory Therapy Staff				
Physical Therapy Staff				
Occupational Therapy Staff				
Radiology Technicians				
Medical staff				
Students (from any of the above disciplines)				

2. Frequency of Updates related to Fall Prevention:

Clinical Role	None	Monthly or >	Quarterly	Semi-annual	Annual	Sporadic
RN Nursing Staff						
LVN Nursing Staff						
NA Nursing Staff						
Respiratory Therapy Staff						
Physical Therapy Staff						
Occupational Therapy Staff						
Radiology Technicians						
Medical staff						
Students (from any of the above disciplines)						

3. Frequency they receive trend analyses to understand fall prevention.:

Clinical Role	None	Monthly or >	Quarterly	Semi-annual	Annual	Sporadic
RN Nursing Staff						
LVN Nursing Staff						
NA Nursing Staff						
Respiratory Therapy Staff						
Physical Therapy Staff						
Occupational Therapy Staff						
Radiology Technicians						
Medical staff						
Students (from any of the above disciplines)						

Review of Your Falls Data - Worksheet

CalNOC Facility Code No. [ ][ ][ ] Date of Review [ ][ ] [ ][ ] [ ][ ][ ][ ] This Data Review Completed by: _____

Based on analysis of our CalNOC Falls Data:	Compared to other organizations in the CalNOC database our hospital is:			Trends indicate our hospital fall rate is:			In terms of our priorities, Falls incidence and injuries in our hospital require us to:		
	Best Practice	Average	Below Average	Stable	Improving	Declining	Improvement Priority	Monitor Trends	No Action Needed
Fall rate per 1000 patient days [ ][ ][ ]									
Fall with injury rate per 1000 patient days [ ][ ][ ]									
Percent of falls that were accidental [ ][ ][ ]									
Percent of anticipated physiological falls. [ ][ ][ ]									
"At Risk" Patient: Percent with prevention protocols in place [ ][ ][ ]									
Percent of anticipated physiological falls with fall prevention protocol in place [ ][ ][ ]									
Percent of anticipated physiological falls assessed as "At Risk" [ ][ ][ ]									
Percent with restraints in place at the time of fall [ ][ ][ ]									
Percent observed at the time of fall [ ][ ][ ]									

Trip to Reduce Falls Intervention

- Institutional baseline ***self-assessment***
- Individualized falls related ***drill down data*** analysis report and facilitated presentation
- ***Coaching*** for performance improvement
- ***Linker role*** development
- ***CE*** for key staff related to falls reduction
- Strategic ***resources***
- ***Networking, benchmarking & synergy***

Explicating Target Adoption Indicators/Milestones

Through participation in the Coaching Intervention, participating clinical settings will strengthen their capacity to:

- **TARGET OUTCOME #1:** Use data to guide performance improvement
- **TARGET OUTCOME #2:** Use reliable and valid risk assessments as the basis for selecting and implementing individualized fall prevention interventions.
- **TARGET OUTCOME # 3:** Implement individualized interventions to prevent falls/reduce injury that are linked to patient risk factors
- **TARGET OUTCOME #4:** Effectively document and communicate and engage staff, patient, family in fall risk status & interventions to prevent falls and fall related injury
- **T ARGET OUTCOME #5:** Engage organization in systematic PI effort through strengthening evidence-based care processes

Documentin Progress

CalNOC Partners for Quality to Reduce Hospital Falls Project

COACHING INTERVENTION WORKSHEET

Supported By AHRQ Grant #1U18HS1370401
Approved by the UCSF Committee on Human Research #H1752-23425-01

Nancy E. Donaldson RN, DNSc., FAAN,
UCSF School of Nursing, Principal Investigator
Pat McFarland RN, MS, Executive Director, ACNL, Project Director
Co-Investigators: Drs. Diane Brown, Linda Burnes Bolton, Carolyn Aydin,
Nancy Dunton, Dana Rutledge, Diane Pravikoff, Kristin Geiser and Jerry Kellogg, MA

Target Milestone 1A: Organizational Infrastructure

1A.10 Administrative sponsor
1A.11 PI accountability
1A.12 Institutional resources
1A.13 Previous improvement
1A.14 Strategic concerns
1A.15 Key stakeholders
1A.16 Falls indicators
1A.17 Data flow
1A.18 Report preparation
1A.19 Using unit level falls data
1A.20 Accountability unit-level falls
1A.21 Trends in patient falls
1A.22 Key findings
1A.23 Key opportunities
1A.24 Definitions
1A.25 Compare definition
1A.26 Near-miss
1A.27 Subsequent falls
1A.28 Explain differences

Target Milestone 1B: Organization Benchmarks

1B.10 Reliability and validity
1B.11 Benchmarks used
1B.12 Benchmarks findings
1B.13 Target thresholds
1B.14 Organizational measures
1B.15 Organization success
1B.16 Strategic evaluation indicators

Topic Discussed				Activity							Target of Activity			
				Monitoring	Information	Support	Planning	Action Taken	Referral (person)	Resource (lit. etc.)	Linker	Manager/Staff	Unit	Organization

Tracing Adoption

- Strategic priorities & commitments explicated in a plan
- Tracking selected indicators of adoption action
- Confirming key milestone in adoption sequence
- Observing, auditing and documenting
- Triangulation!

Evidence of Clinical Adoption

- Organizational Level Evidence
- Clinician Behaviors/Reports
- Audits & Observation
- Patient Outcomes
- Patient/Family Perceptions & Experiences

Multifaceted Measures

- Evidence of organizational UPTAKE observed in P&P; documentation; infrastructure; execution of strategic plan; capacity development (CE; credentialing)
- Evidence of clinical ADOPTION
- Evidence of clinical IMPACT
- Evidence of diffusion

Preliminary Measurement Insights

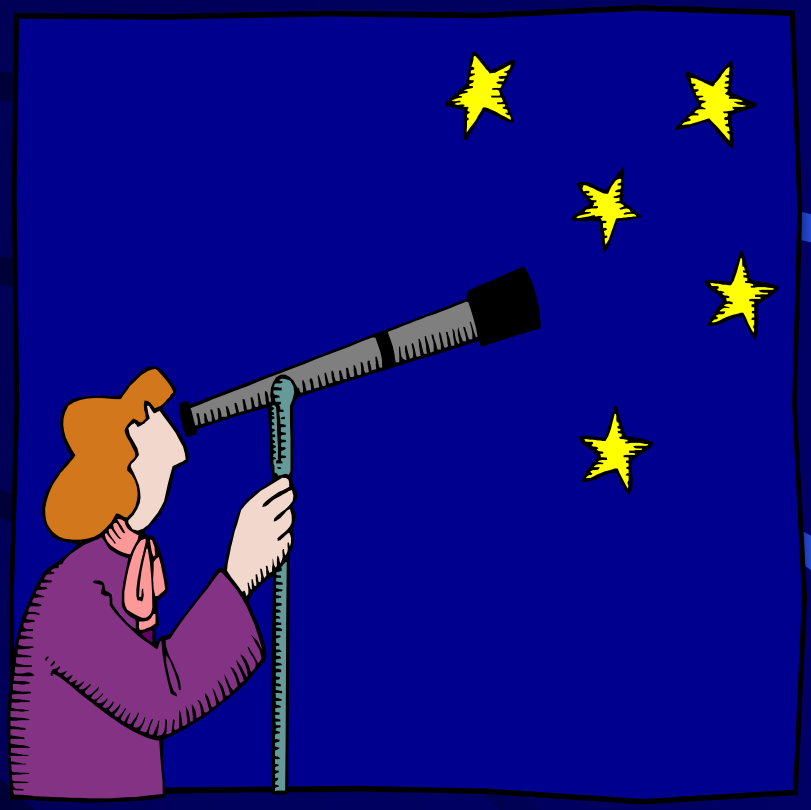
- The challenge of explicating the target adoption behaviors and indicators—lessons from RCT method
- Recognizing the need for organizational and clinician individualization in translation and adoption
- Self-assessment as an intervention
- Evidence as mirror and motivation

Institutionalization of Innovation

- Embedding the innovation in the systems fabric of the organization
- Systems changes that perpetuate and sustain the target change

Passionate Leadership

- Articulate the vision
- Link to the evidence
- Refine strategic alignment
- Develop capacity to speak to the data; summarize the evidence; conclusions and implications
- Lay track as you go
- Mastery is a myth



Future Directions for Performance Measurement

- Greater demand standardized measures, e.g., collect one time, same format
- Common data elements across care settings, e.g., workforce data across all settings to forecast shortages, over supply, etc.
- Uniform reporting across settings, e.g., nurse staffing

Sprenger, Sharon, Project Director, Group on Performance Measurement
Division of Research, JCAHO

Just Imagine

- Using computational modeling to transform nursing data into actionable information
- Mining rich nurse staffing and patient outcomes data to explore the impact of nursing staffing on patient outcomes and safety by pt population; by unit; by shift.

Just Imagine

- NDNQI, CalNOC, MilNOD and VANOD collaborating to produce standards for data management methods, analysis and interpretation; inter-dataset studies; leveraging one another's new indicators! Benchmarking across datasets!!

Thank you!